

CLAIMS

We claim:

1. A method for presenting database query results through an audio user interface (AUI), comprising:
 - initiating a database query operation, said operation retrieving a plurality of database query result items from at least one database; and,
 - presenting each said query result item through the AUI as each said query result item is found in said at least one database, said presentation occurring concurrently with said database query operation.
2. The method of claim 1, further comprising:
 - detecting a speech response through the AUI during said presentation, said speech response selecting said query result item presented through the AUI; and,
 - responsive to said detection, terminating said database query operation.
3. The method of claim 2, further comprising:
 - detecting a command during said presentation to terminate said database query operation; and,
 - responsive to said detection, terminating said database query operation.
4. The method of claim 3, wherein said command is a speech command.
5. The method of claim 1, further comprising:
 - inserting each result item in a data structure as each query result item is found;
6. The method of claim 5, wherein said presenting step comprises:
 - presenting each query result item contained in said data structure independently of but concurrently with said database query operation.

1 7. The method of claim 1, wherein said data structure is selected from the group
2 consisting of a list, a stack, and a database.

1 8. The method of claim 1, wherein said AUI is a telephony interface.

1 9. A system for presenting database query results through an audio user interface
2 (AUI) comprising:

3 a database manager for managing a database query operation on at least one
4 database, said database query operation producing database query result items; and,

5 a dialog manager for managing the presentation of said database query result
6 items through the AUI concurrently with said database query operation.

1 10. The system of claim 9, wherein said AUI comprises:

2 a text-to-speech processor for converting said database query result items into
3 audible speech; and,

4 a speech recognition engine for converting speech input into text recognizable by
5 said dialog manager.

1 11. The system of claim 10, wherein said AUI further comprises:
2 a barge-in facility.

1 12. The system of claim 9, further comprising:

2 a queue for storing database query result items from said database query
3 operation; and,

4 a queue manager for managing the insertion and removal of database query
5 items to and from said queue.

1 13. A machine readable storage having stored thereon a computer program for
2 presenting database query results through an AUI, said computer program having a
3 plurality of code sections executable by a machine for causing the machine to perform
4 the steps of:

5 initiating a database query operation, said operation retrieving a plurality of
6 database query result items from at least one database; and,

7 presenting each said query result item through the AUI as each said query result
8 item is found in said at least one database, said presentation occurring concurrently
9 with said database query operation.

1 14. The machine readable storage of claim 13, further comprising:

2 detecting a speech response through the AUI during said presentation, said
3 speech response selecting said query result item presented through the AUI; and,
4 responsive to said detection, terminating said database query operation.

1 15. The machine readable storage of claim 14, further comprising:

2 detecting a command during said presentation to terminate said database query
3 operation; and,

4 responsive to said detection, terminating said database query operation.

1 16. The machine readable storage of claim 15, wherein said command is a speech
2 command.

1 17. The machine readable storage of claim 13, further comprising:

2 inserting each result item in a data structure as each query result item is found;

1 18. The machine readable storage of claim 17, wherein said presenting step
2 comprises:
3 presenting each query result item contained in said data structure independently
4 of but concurrently with said database query operation.

1 19. The machine readable storage of claim 13, wherein said data structure is
2 selected from the group consisting of a list, a stack, and a database.

1 20. The machine readable storage of claim 13, wherein said AUI is a telephony
2 interface.